

Remarks

This amendment is accompanied by a Supplemental Information Disclosure Statement. Independent claim 84 has been amended to recite a water vapor-resistant “transparent composite” barrier “under or over the device”, the composite barrier comprising “multiple barrier layers”. Antecedent basis for these amendments may be found at, e.g., pages 5, 7, 9 and 12 of the Provisional Application¹, and at page 5, lines 30 – 35 of the Second Substitute Specification. Dependent claims 85 – 91, 94 – 95, 97, 100, 101, 112 and 113 have been editorially amended.

Following entry of this amendment, claims 39, 40, 50, 73 – 76 and 79 – 146 will be pending with claims 39, 40, 50, 73 – 76, 102, 103, 109 and 115 – 145 having been withdrawn.

The Final Rejection states that:

“upon a review of the provisional application, it was determined that the instant claims (and portions of the specification) are not fully supported by the provisional application and hence the Applicant is not afforded the effective date of the provisional application. The effective date of the instant application is therefore the actual filing date of the parent application, October 18, 1999.” (see numbered paragraph 3 at page 2).

¹ Applicant thanks the Examiner for making available to the assignee a copy of the Provisional Application as filed in the USPTO. From this inspection it was learned that the filed copy contained 10 pages of drawing figures not in the assignee’s possession and that the page numbering for the filed copy may have been different from the assignee’s copies. Henceforth applicant will refer to the Abstract as page 1, to the page with the subheading “Outline” as page 2, to the page with the subheading “Introduction” as page 3, and so on. These pages generally correspond to one less than the fax page number shown on each page. Applicant had earlier referred to the Abstract as page 13, to the page with the subheading Outline as page 1, to the page with the subheading Introduction as page 3, and so on, and apologizes for any confusion this may have caused.

Reconsideration is requested. Several of the claims are fully supported in the Provisional Application. For example, current claims 79 – 83 are supported by at least the following passages (the page references have been corrected as noted in the footnote shown above):

Claims	Support
79	Provisional Application, e.g., at pages 1, 3, 5 and 7 – 12
80	Provisional Application, e.g., at pages 1, 5, 7, 8 and 10 – 12
81	Provisional Application, e.g., at pages 1, 11, 17 and 18
82	Provisional Application, e.g., at pages 5, 11, 12, 17 and 18
83	Provisional Application, e.g., at pages 1, 9 and 12

Also, several of the withdrawn claims (e.g., claims 118 – 121) are fully supported in the Provisional Application. Applicant reserves the right to argue if need be that other claims are likewise fully supported in the Provisional Application.

**Rejection of claims 79 – 90, 92 – 97, 104 – 108, 110 – 114
and 146 under 35 USC §102(e)**

Claims 79 – 90, 92 – 97, 104 – 108, 110 – 114 and 146 were rejected under 35 USC §102(e) as being anticipated by U.S. Patent No. 6,268,695 B1 (Affinito).

Reconsideration is requested. First, Affinito is not prior art, having a filing date after applicant's Provisional Application filing date. Applicant reserves the right to swear behind Affinito as need be or to provide evidence that relevant portions of Affinito were derived from applicant's own prior work.

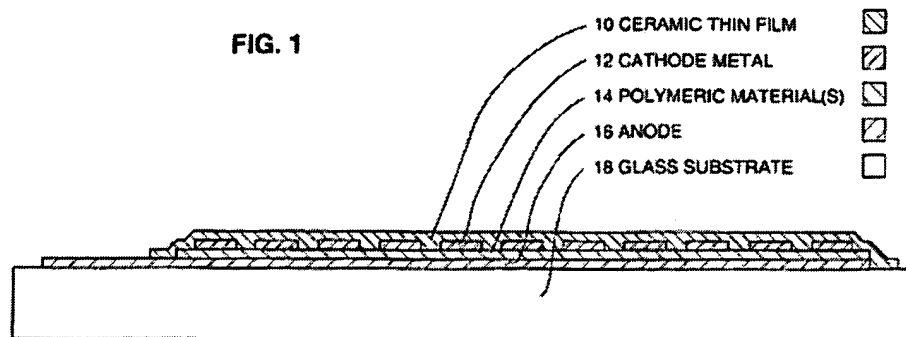
Second, Affinito does not disclose devices having “conductive” metal oxide or “conductive” metal nitride layers as recited in these rejected claims. Affinito's barriers have stoichiometric ceramic layers (see, e.g., col. 3, lines 54 – 65 and specific stoichiometric entries such as “indium tin oxide (ITO, $\text{In}_2\text{O}_3+\text{SnO}_2$)” at col. 3, line 63). Such stoichiometric layers are non-conductive. Some ceramic materials may be made

conductive. For example, an indium tin oxide layer may be made conductive by reducing or doping the layer, see, e.g., the Provisional Application at page 8 and the Second Substitute Specification at page 5, lines 19 – 24 and page 12, lines 11 - 20. The resulting layer would not be stoichiometric. If an indium tin oxide layer is described as a “ceramic”, said to have the stoichiometric formula “ $\text{In}_2\text{O}_3 + \text{SnO}_2$ ”, and is not said to be conductive, it can be assumed to be nonconductive. Affinito does not disclose applicant’s conductive layers. This is further demonstrated by Affinito’s absence of discussion or tests regarding the conductivity or resistivity of his ceramic layers. Applicant accordingly requests withdrawal of the 35 USC §102(e) rejection of claims 79 – 90, 92 – 97, 104 – 108, 110 – 114 and 146 as being anticipated by Affinito.

Rejection of Claims 91, 98, 99 and 101 under 35 U.S.C. §103(a)

Claims 91, 98, 99 and 101 were rejected under 35 U.S.C. §103(a) as being unpatentable over Affinito in view of U.S. Patent Application Publication No. 2003/0184222 A1 (Nilsson et al.). Reconsideration is requested. For at least the reasons noted above, Affinito does not “teach that the ceramic layer may be formed by transparent **conductive** or dielectric oxides and nitrides and combinations thereof” (emphasis added). When Affinito says that his first or second ceramic layers may be made from various ceramic materials “and combinations thereof” (see, e.g., col. 3, lines 57 – 58 and 65), he is referring to a combination of ceramics in a layer, not saying that applicant’s recited three layer configuration should be formed or that ceramic layers of different materials may be combined in any order. No basis has been shown for the assertion that “it would have been obvious to one having ordinary skill in the art at the time of the invention to utilize ... **any combination of layers of these materials** in producing the invention taught by Affinito” (emphasis added).

Nilsson et al. does not remedy Affinito’s deficiencies. Nilsson et al.’s devices have a transparent anode and glass substrate, such as the anode 16 and glass substrate 18 in Fig. 1:



(see also lines 2 and 19 in paragraph 0004, and line 3 in paragraph 0029). Such devices typically emit light between the cathode and anode and transmit it through the transparent anode and glass substrate. Nilsson et al. do not say that the ceramic thin film layer 10 or cathode 12 are transparent, and would not need such transparency. Nilsson et al. do not describe or make obvious a transparent composite barrier such as is recited in rejected claims 91, 98, 99 and 101.

Nilsson et al. also do not say that the ceramic thin film layer 10 is “conductive”. Nilsson et al. in fact say that their “protective seal” includes “silicon nitride (SiN) or **other inorganic dielectric**” (see the Abstract, lines 4 – 6, emphasis added). Nilsson et al. do not describe or make obvious a conductive metal nitride layer such as is recited in claim 95 from which rejected claims 98 and 99 depend.


Conclusion

Applicant has made an earnest effort to address the Office Action’s arguments. The cited Affinito reference does not disclose conductive metal oxide or conductive metal nitride layers and does not anticipate the devices of claims 79 – 90, 92 – 97, 104 – 108, 110 – 114 or 146. The cited Nilsson et al. reference does not disclose or suggest transparent composite barrier layers or conductive metal nitride layers. Whether taken alone or in combination, Affinito and Nilsson et al. do not disclose or make obvious the devices of claims 91, 98, 99 or 101. Withdrawal of the rejections is accordingly

requested. The Examiner is also encouraged to call the undersigned attorney if there are any questions regarding this application.

Respectfully submitted on behalf of
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Registration Number	Telephone Number:
29,524	612-331-7412
Date	
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Signature

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